



National Digital Information Infrastructure and Preservation Program (NDIIPP)

April 16, 2002

CNI Spring 2002 Task Force Meeting

NDIIPP Goal

- To develop a nationwide collection and preservation strategy for digital materials in cooperation with the information and technology industry, concerned federal agencies, libraries, research institutions and not-for-profit entities.

NDIIPP Funding

- Up to \$175 million potentially available
 - \$5 million (available now until expended)
 - \$20 million (subject to advance Congressional approval)
 - \$75 million (subject to \$ for \$ match from non-federal sources by March 31, 2003)
 - \$75 million (private funds)

NDIIPP Plan

- Three Phases
 - Planning - develop a plan to present for Congressional approval.
 - Partnerships - establish partnerships with other institutions and organizations to initiate projects that meet specific digital strategy objectives.
 - Evaluation and Recommendations - evaluate the work that has been done and recommend how the program might be continued

NDIIPP Preliminary Steps

- Establish the National Digital Strategy Advisory Board (NDSAB)
- Develop ways to listen and learn
- Create a process for developing sustainable models
- Coordinate with other federal agencies
- Survey national and international preservation initiatives

NDIIPP Environmental Scans

- Archiving the World Wide Web
- Preserving Digital Periodicals
- Preservation of Digitally Recorded Sound
- E-books and the Challenge of Preservation
- Understanding the Preservation Challenge of Digital Television
- Digital Video Archives: Managing through Metadata

NDIIPP Convening Sessions

- Conducted 3 workshops with industry
- Identified barriers and issues related to preservation of digital content

NDIIPP Process

- Convening Sessions - Areas of Consensus
 - Consensus behind the national preservation (NDIIPP) initiative
 - Consensus on some form of distributed or decentralized solution
 - Agreement on need for digital preservation research
 - Appreciation of the importance of technologies as part of the solution set but not the only driver

NDIIPP Process

- Convening Sessions – Priority Issues
 - Addressing the legal issues – intellectual property rights; liability
 - Defining the scope -- What is preserved, by whom and at what level?
 - Balancing preservation and access – “dark” archives not wholly desirable but unlimited access not practicable either
 - Evolving economic models for sustainability-- Who pays? Owners? Taxpayers? Donors? Users? Combinations?
 - Understanding who the users will be?

NDIIPP Process

- Stakeholder Meetings – Scenario Planning
 - Process of creating several possible alternative futures that enable organizations to learn and adapt
 - Divergent scenarios allow organizations to think beyond any preconceived notions of the future instead of trying to adopt a single "right answer" for today that risks being rendered obsolete.
 - Scenarios resemble stories that are constructed around plots. In regard to digital preservation, these plots are formed by facilitated discussions with experts and internal stakeholders about the current digital environment and what factors might affect future outcomes.

NDIIPP Scenario Planning

- Broad consensus on:
 - Urgency of problem
 - Need for distributed, decentralized and networked technical architectures
 - Collaborative approach toward shared responsibility for preservation among diverse stakeholder communities

NDIIPP Collaborative Research

- 15 Federal Agencies
- Government-wide Digital Preservation Research Agenda

Collaboration: Research

Developing R&D Strategies for Long-Term Preservation

- Goal -- Develop agenda for collaborative research among all interested parties of the NDIIPP
- Initial list of challenges -- to be refined:
 - Components of a national digital preservation infrastructure (technology infrastructure, policies, economic models, roles and responsibilities)
 - Preservation technologies and tools (repository architecture, robustness, scalability, web harvesting, authentication, large scale back-up and recovery mechanisms)
 - Access and use of preserved digital information (significant attributes of preserved digital objects, interoperability with digital libraries, services of digital archives)
 - Basic computer science issues (algorithms for providing authenticity, attributes of trusted systems, techniques for normalizing heterogeneous digital objects)

Collaboration: Research

Participating Agencies

- National Science Foundation (NSF)
- National Archives & Records Administration (NARA)
- National Endowment for the Humanities (NEH)
- National Institute for Standards & Technology (NIST)
- Department of Commerce
- Government Printing Office (GPO)
- National Library of Agriculture
- DoD
- CIA

Collaboration: Research

Participating Agencies

- National Library of Medicine (NLM)
- Library of Congress
- White House
- NASA
- Environmental Protection Agency (EPA)
- Council on Libraries and Information Research (CLIR)
- CENDI
 - interagency working group of senior Scientific and Technical Information Managers from ten major programs in nine U.S. Federal Agencies

Conceptual Framework: Preservation

- Conceptual framework for national infrastructure components
- Report on critical technical issues for NDIIPP
- Survey of Repository projects and technologies

The Process

